Ezz

User manual

Serial number: 10100001-

Manufacturer

Proton Engineering AB
Caretec
Box 23
SE-568 21 Skillingaryd

Phone	Exchange	+46 370 69 26 60
	Customer service	+46 370 69 26 75
	Spare parts	+46 370 69 26 73
Fax		+46 370 69 26 70

E-post caretec@proton.se
Web www.proton.se
Certified according to ISO 9001 and ISO 14001.

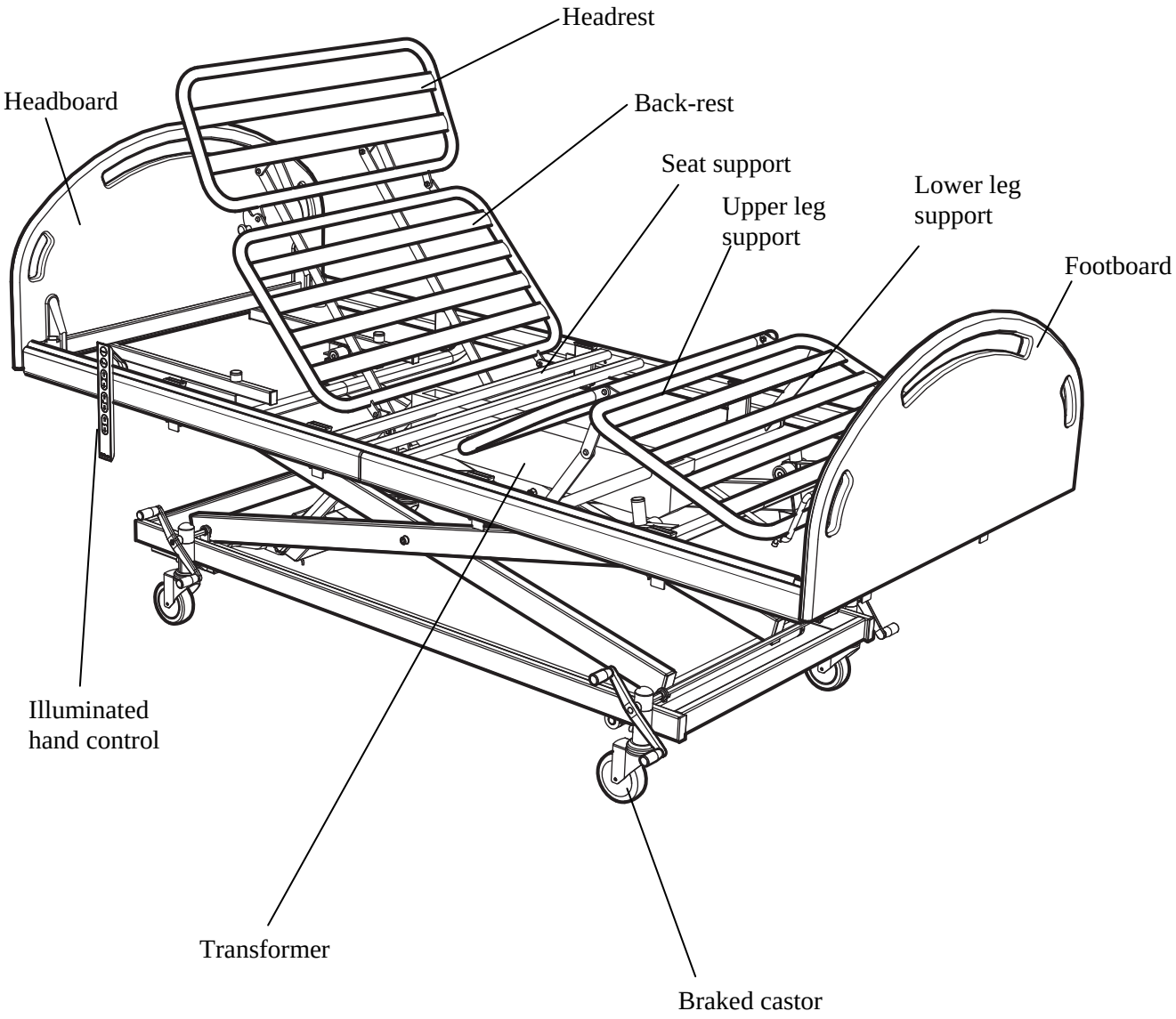
Table of contents

Manufacturer 2
Table of contents 3
Accessories 4
Product description 5
Marking 6
  Ezz Marking 6
Installation 7
  How to dissassemble the bed 9
  How to assemble the bed 10
  Headrest functions 11
Accessories 13
  Side-supports 13
  Alternative positioning of the side-supports 15
  Monkey pole 16
Handling - Hand control operation 17
  To Reclining position (sleeping position) 17
  To Seated position 17
  Height adjustment 18
  Back-rest adjustment 19
  Leg support adjustment 20
  Brake, central locking and individual locking system 22
  How to release the back-rest motor 24
  A few words of advice for the user 25
  Multi-position functions and applications 25
  How to sit up at the bed side (lay down in the bed) 26
  How to rise from the bed 27
  Care and Nursing 28
  Sanitary care in the bed 28
Maintenance schedule 29
  Lubrication/maintenance/Cleaning 29
Technical information 31
  Regulations 31
  Technical information 31
  Material 31
  Weights and measurements 31
  Environment for use 31
Environmental labelling 32
  Business and operation 32
  Environment 32
  The product 32
  Integral parts 33
  Electronics 33
  Recycling 34
How to assemble the integrated wooden frame 35
How to operate the integrated wooden frame 36

Accessories

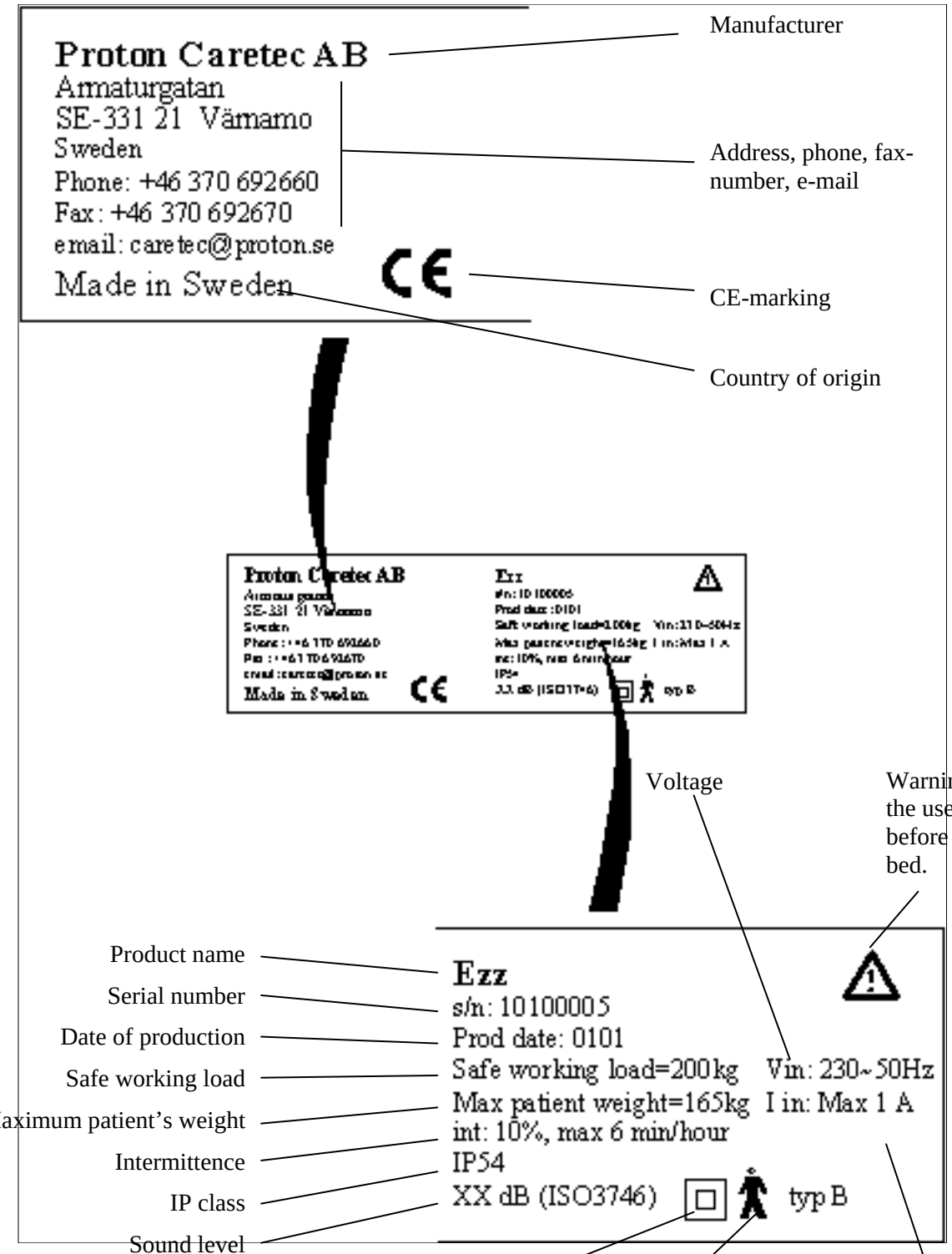
	Product number
Up-support	13611
Base-support	13610
Monkey pole	19209
Caretex mattress, sanitary cover	710074

Product description



Marking

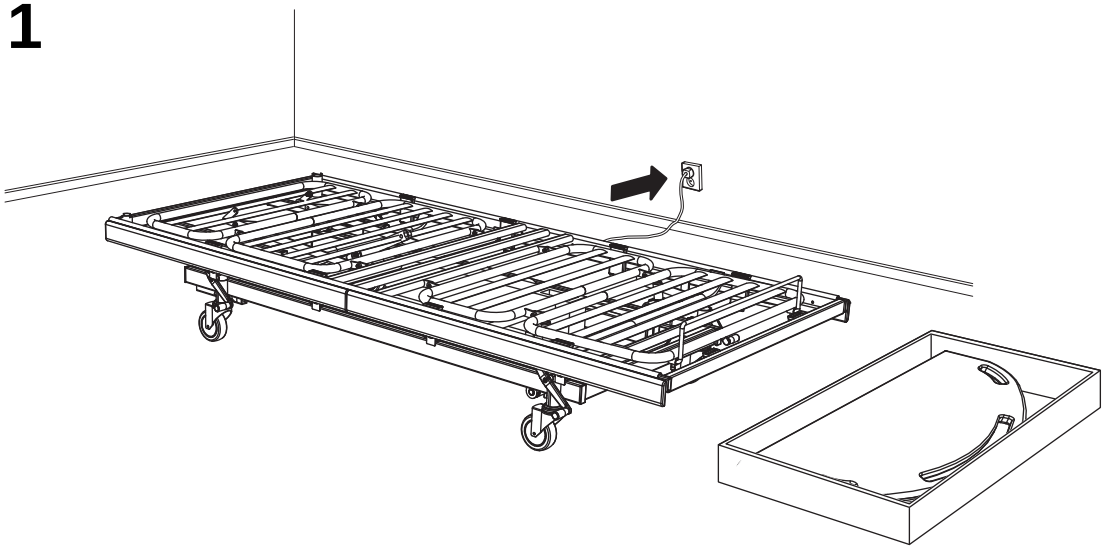
Ezz bed marking



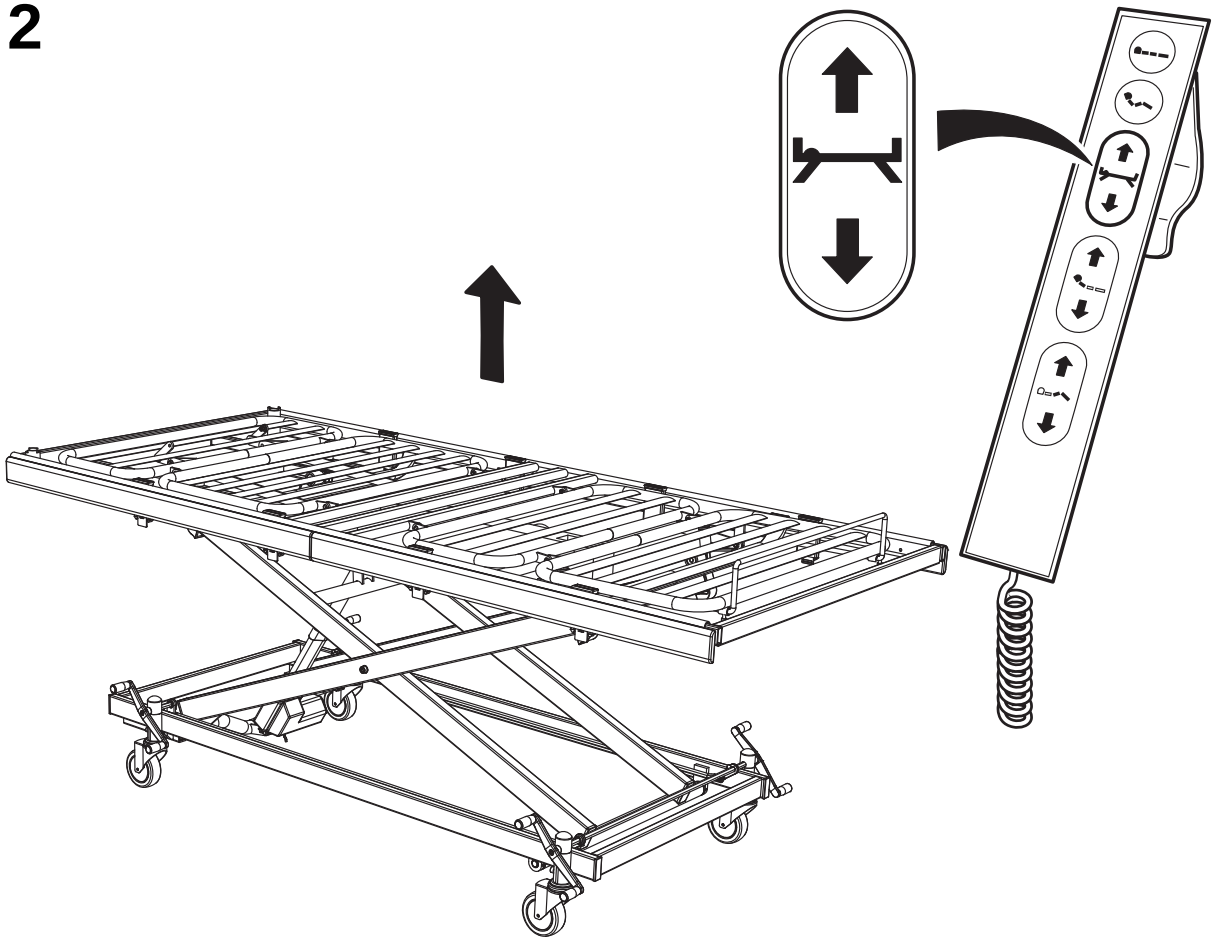
Installation

If the bed must be disassembled or assembled, please see”How to disassemble the bed” and”How to assemble the bed” respectively.

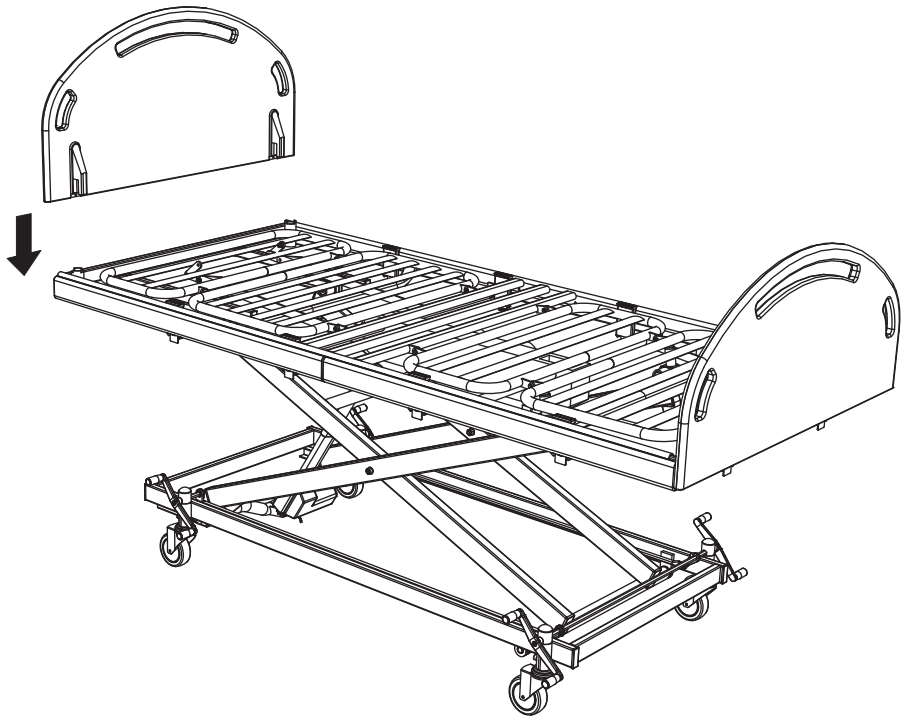
1



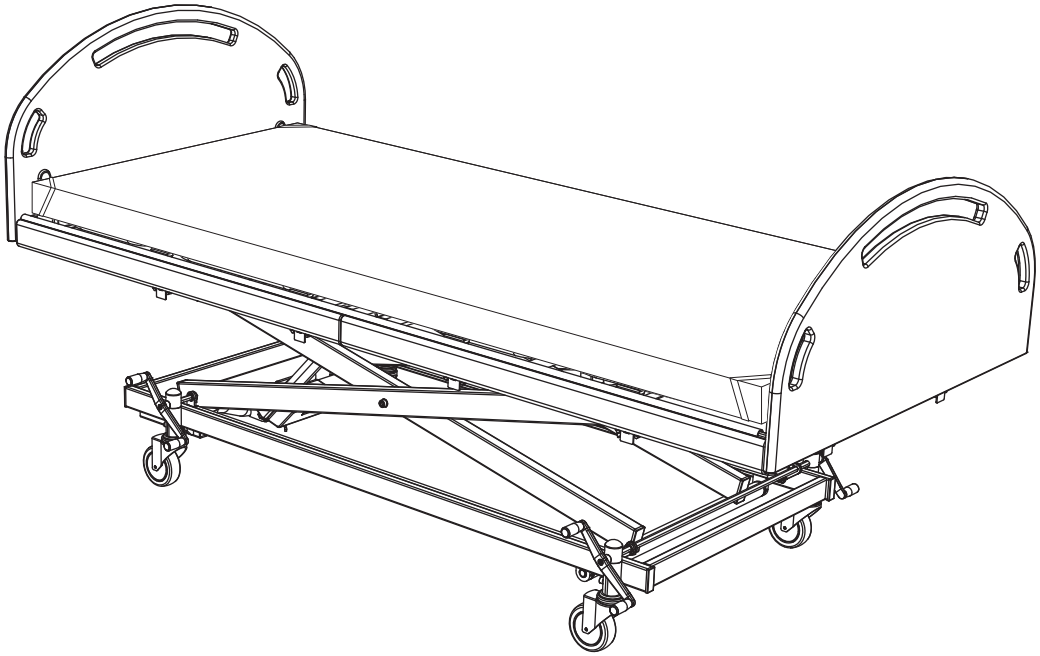
2



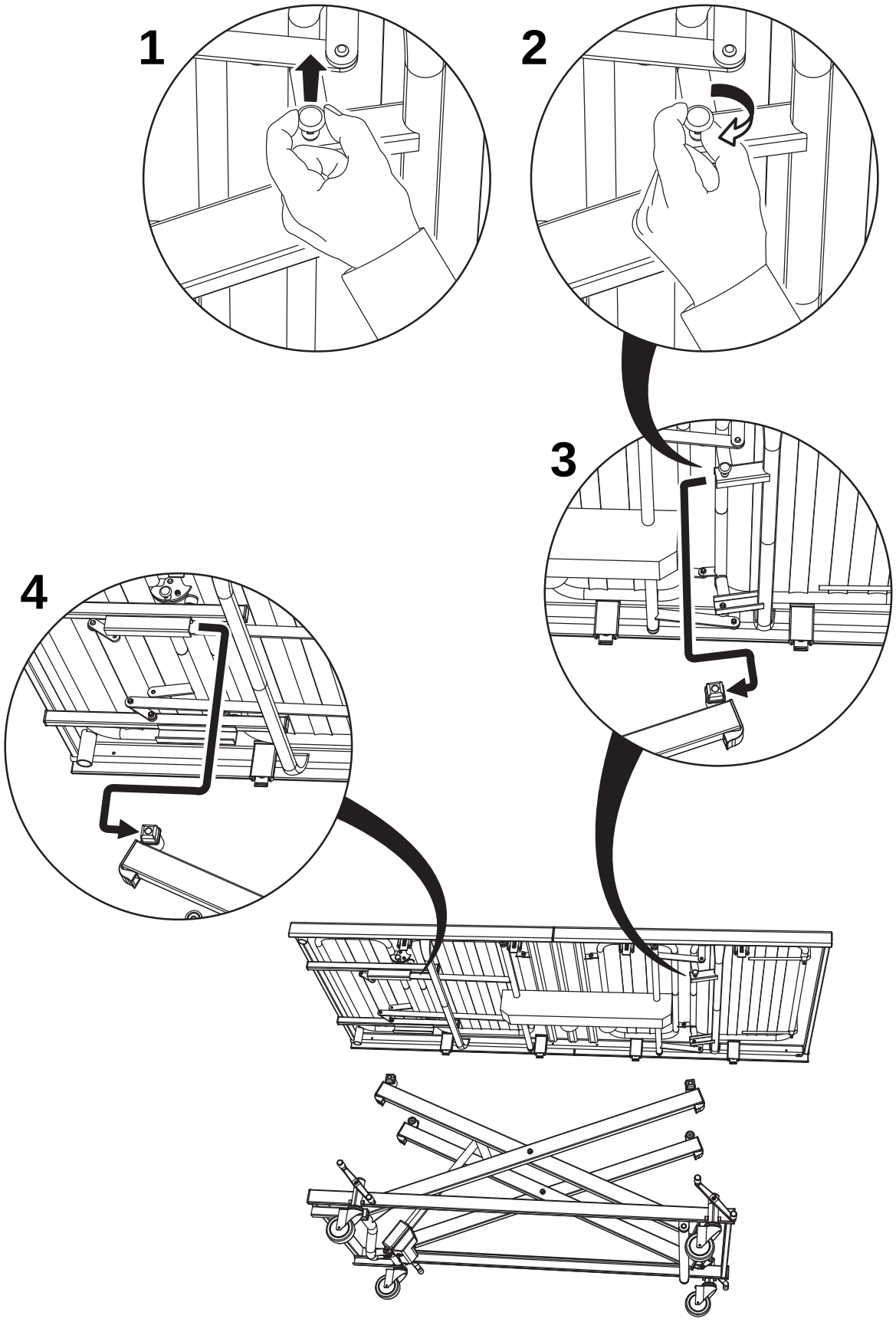
3



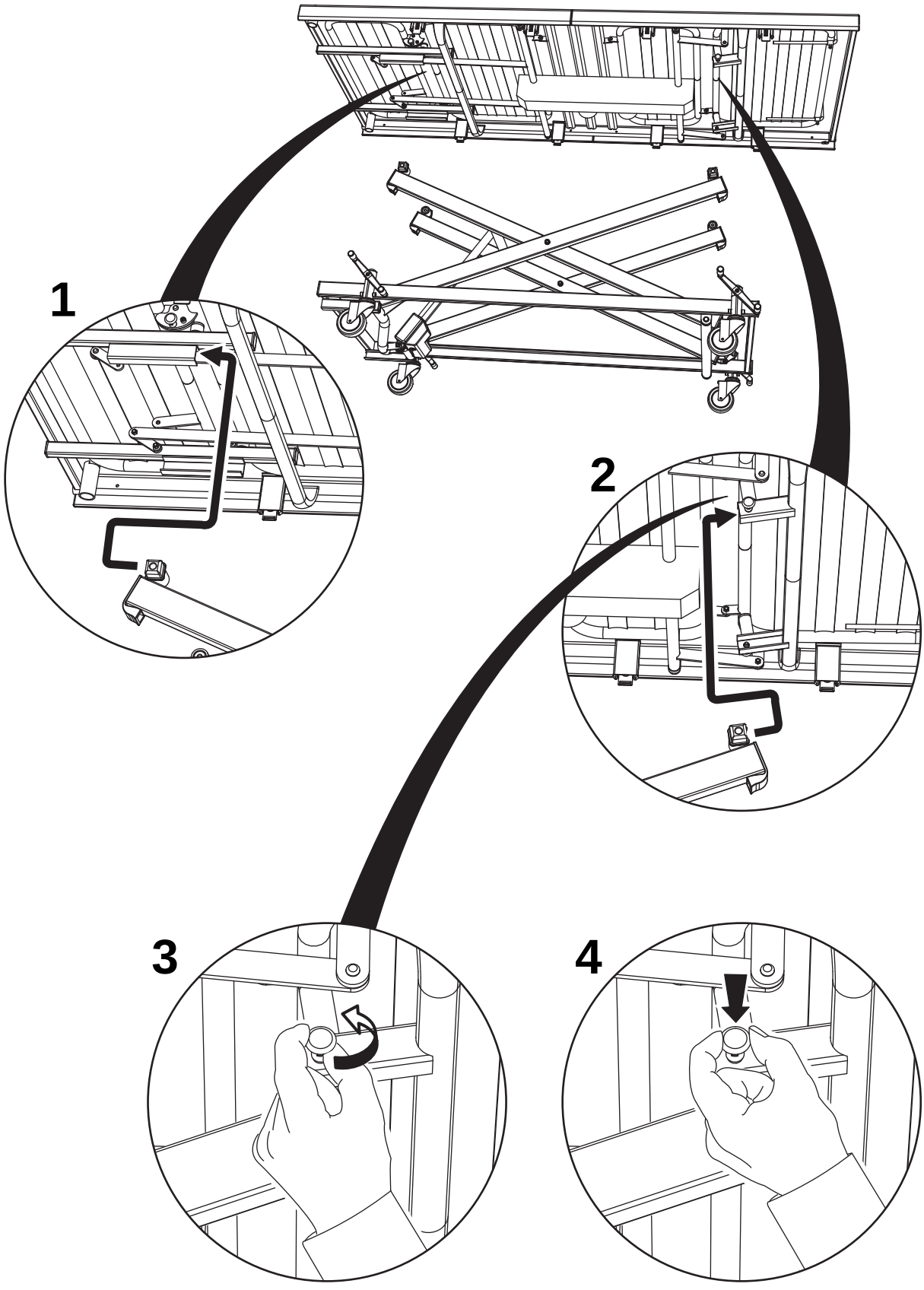
4



How to disassemble the bed.

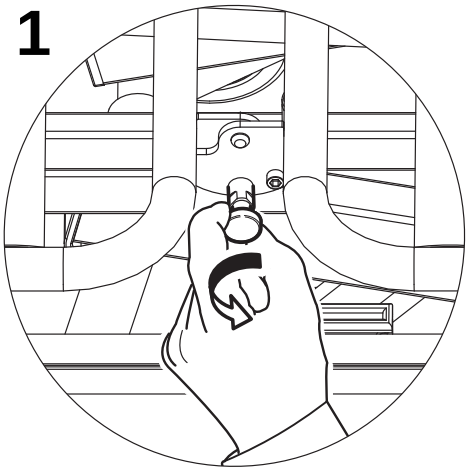


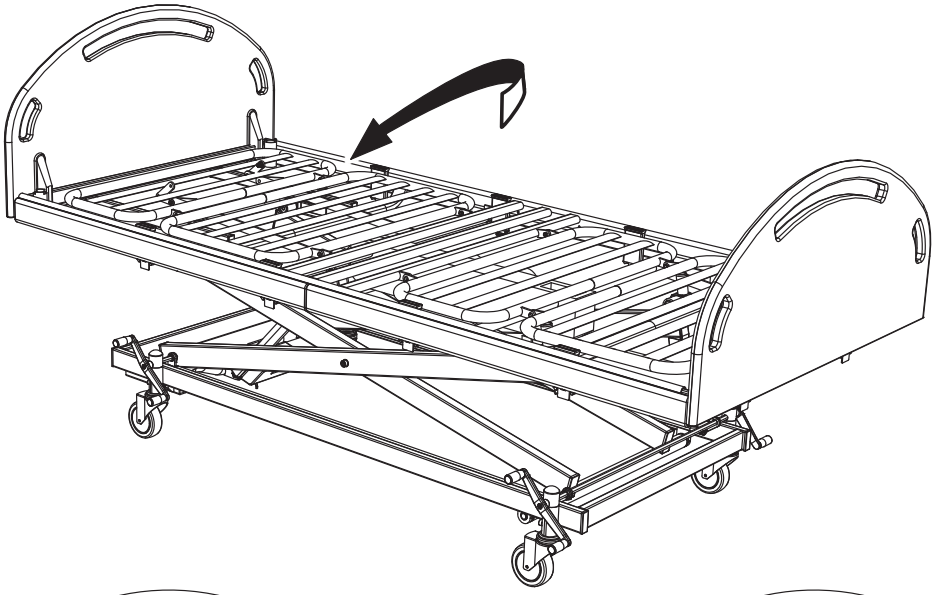
How to assemble the bed.

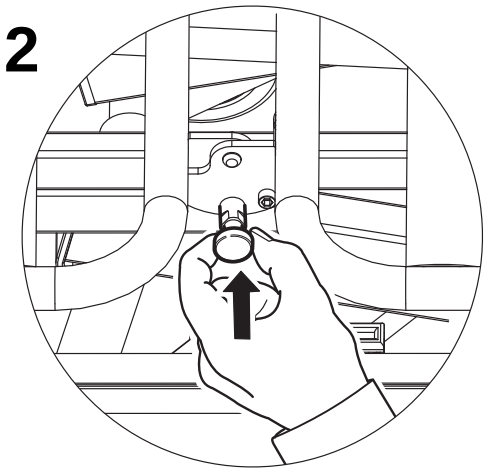


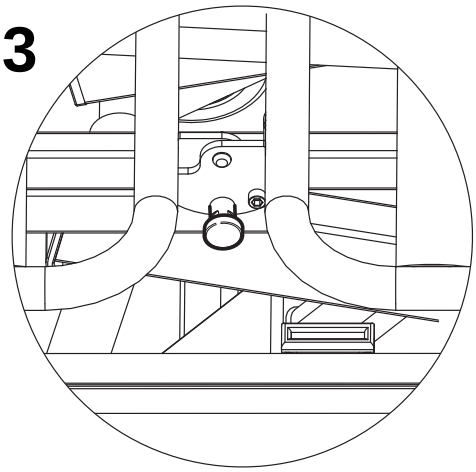
Headrest function.

Disassembling.



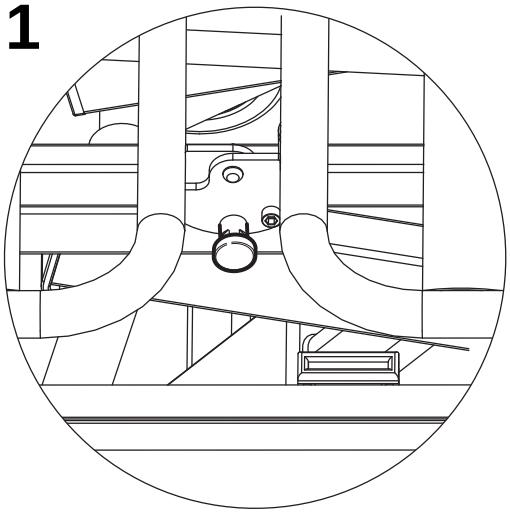




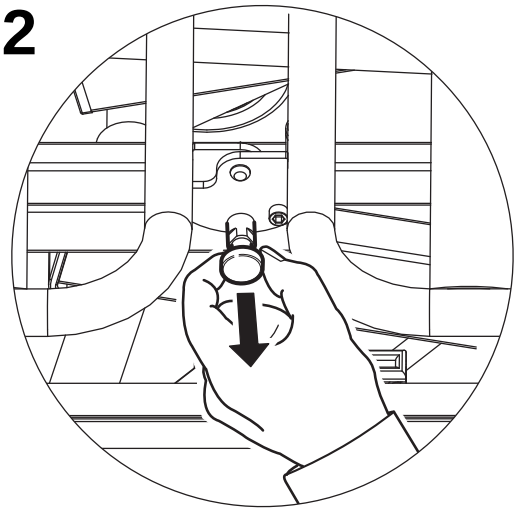


Assembling.

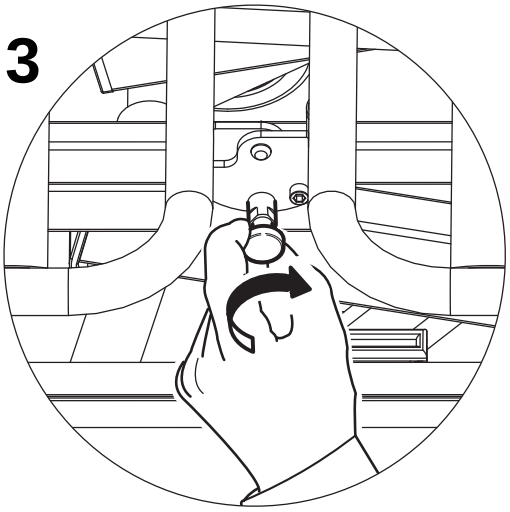
1



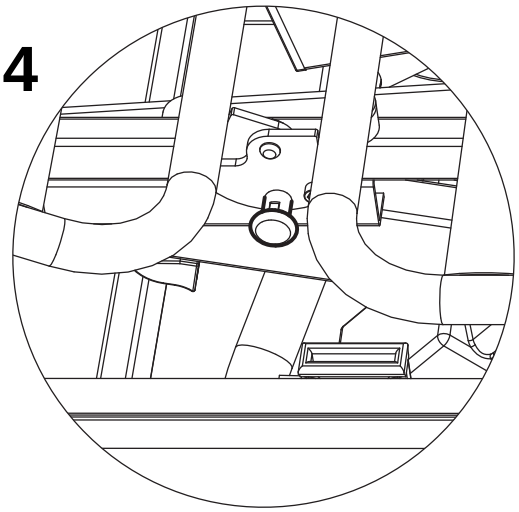
2



3



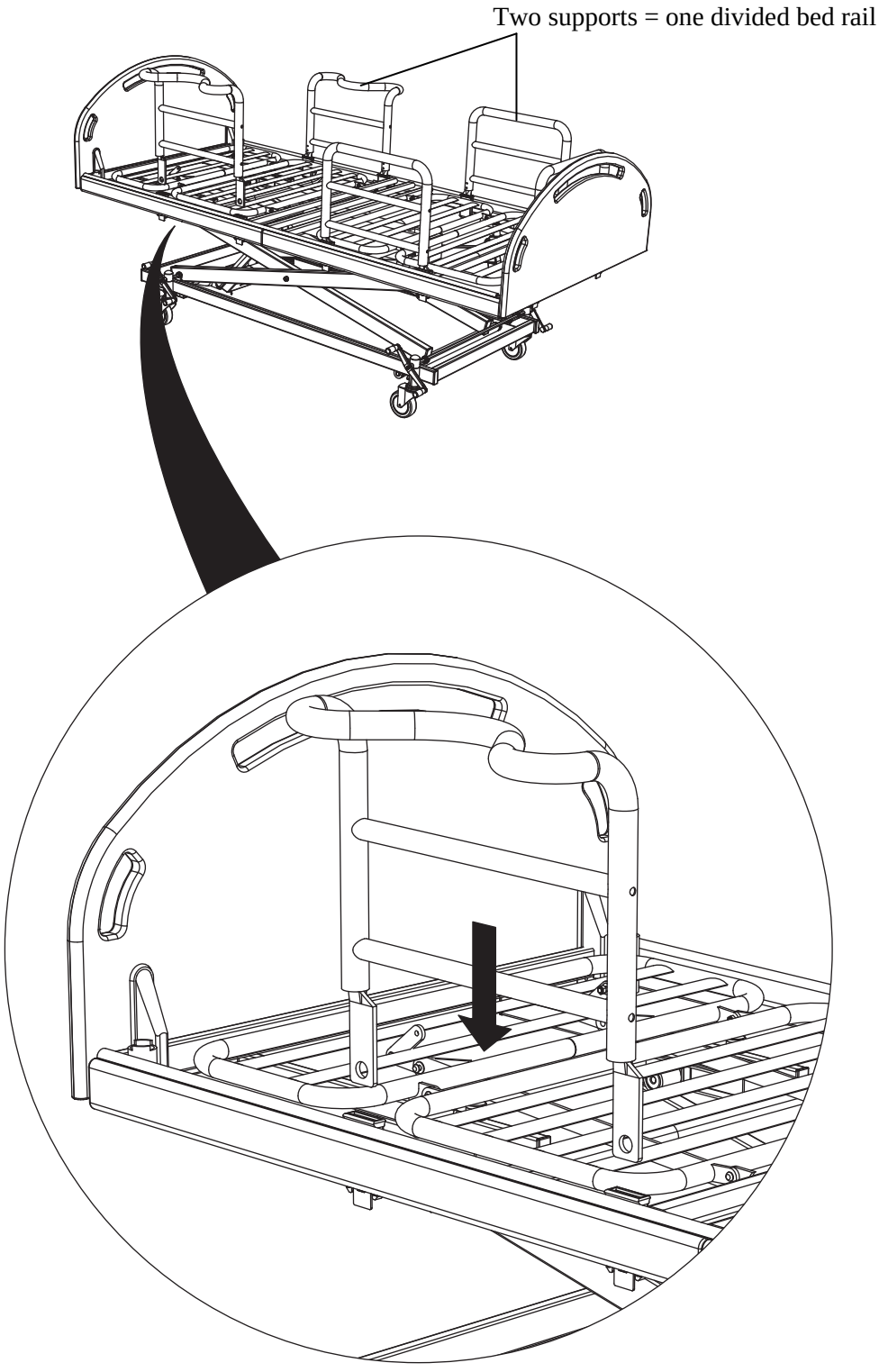
4



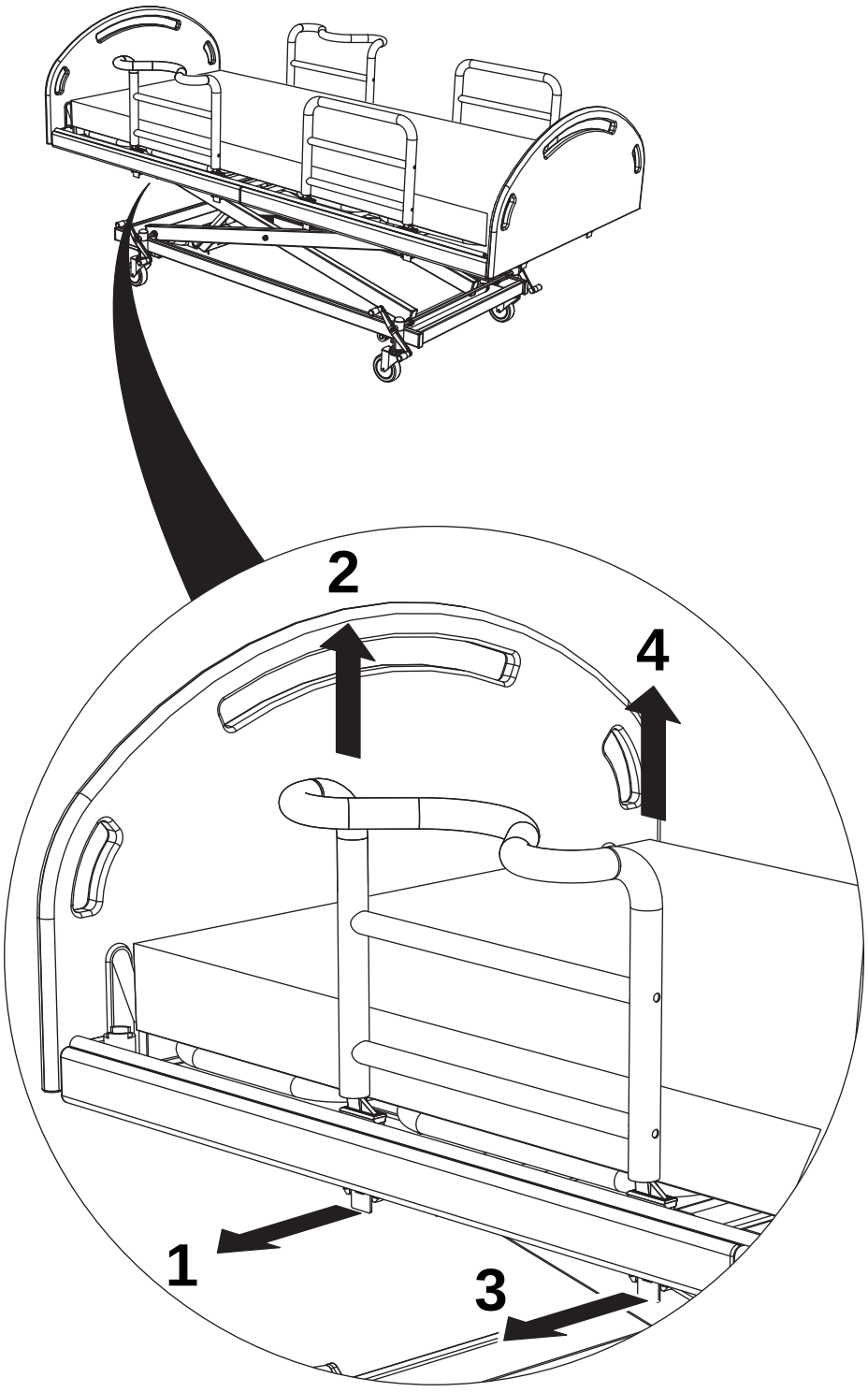
Accessories

Side-supports

How to attach the supports

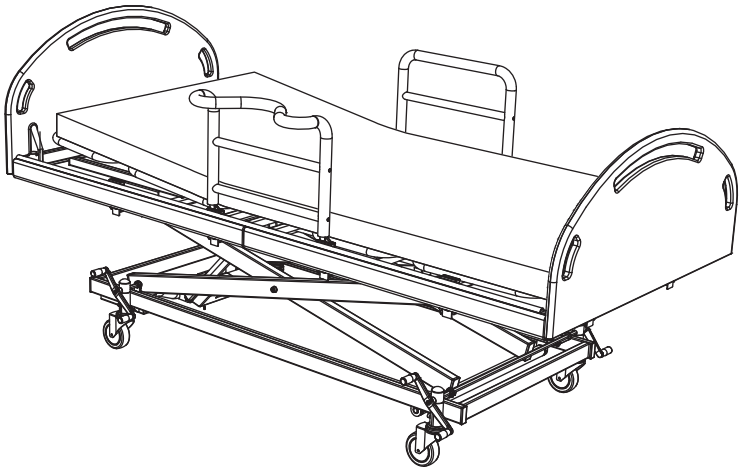


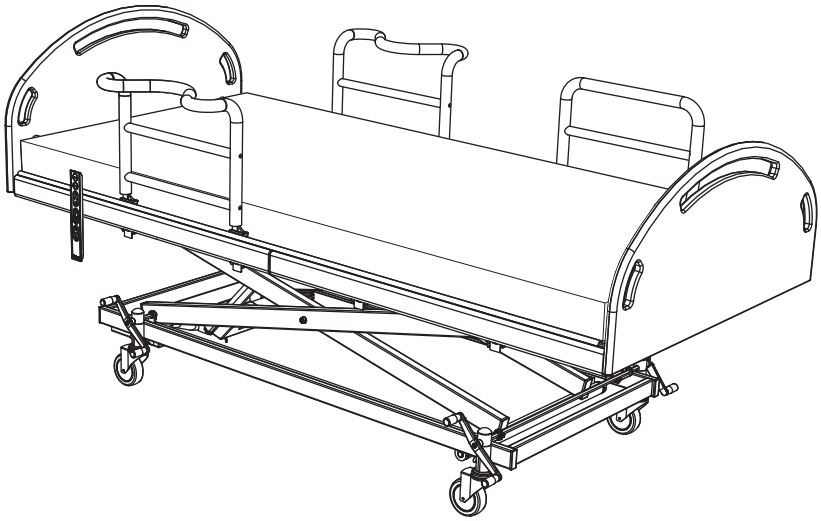
How to remove the supports



Alternative positioning of the side-supports

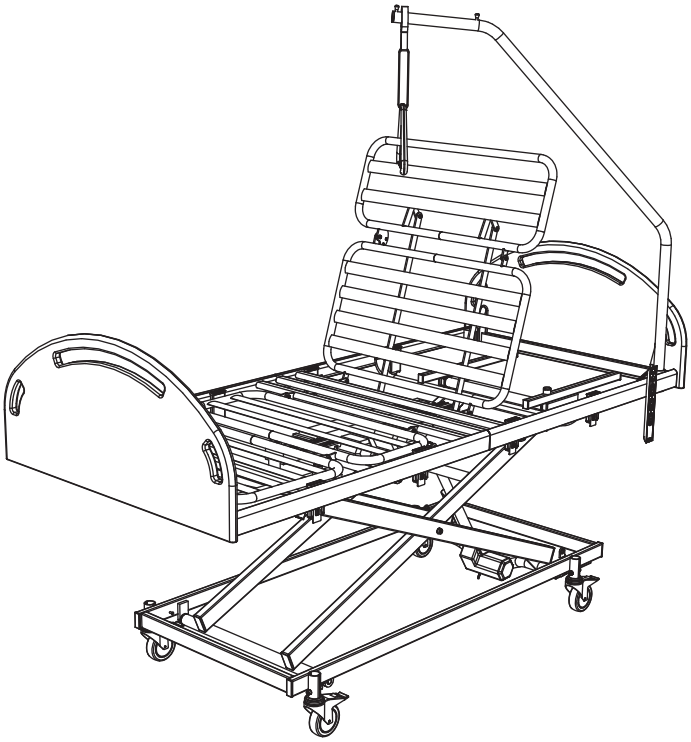
There are many available choices how to use the side-supports. Some examples are illustrated below.





Monkey pole

Mount the monkey pole to have an overbed position, as illustrated in the picture below.

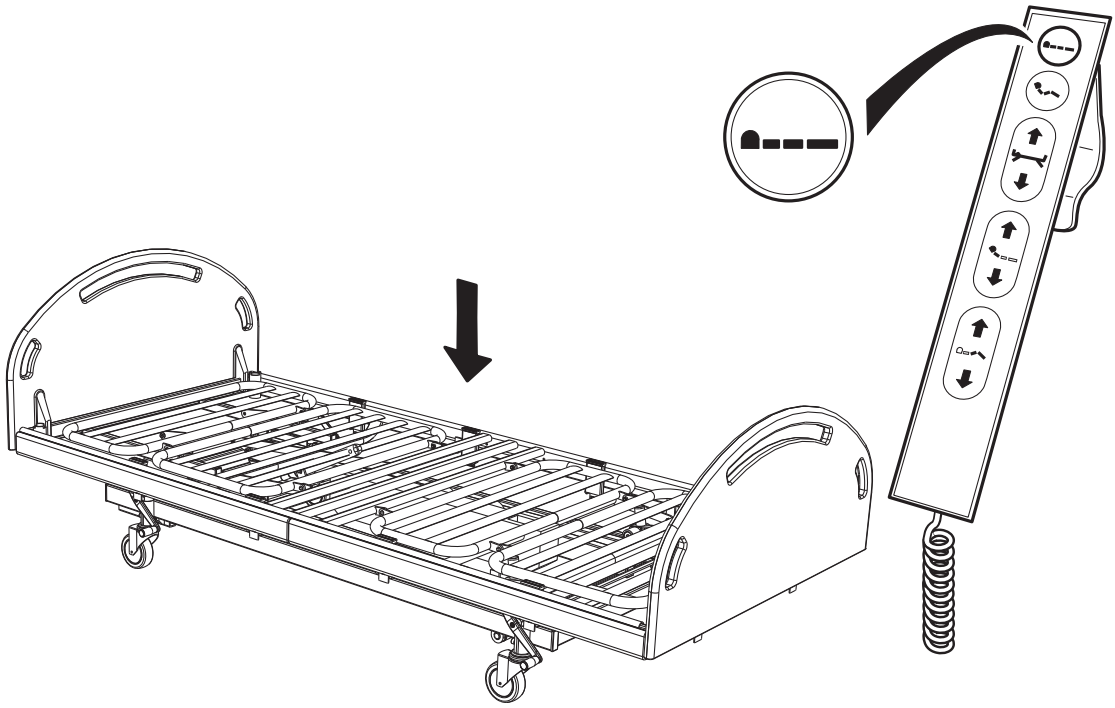


Handling

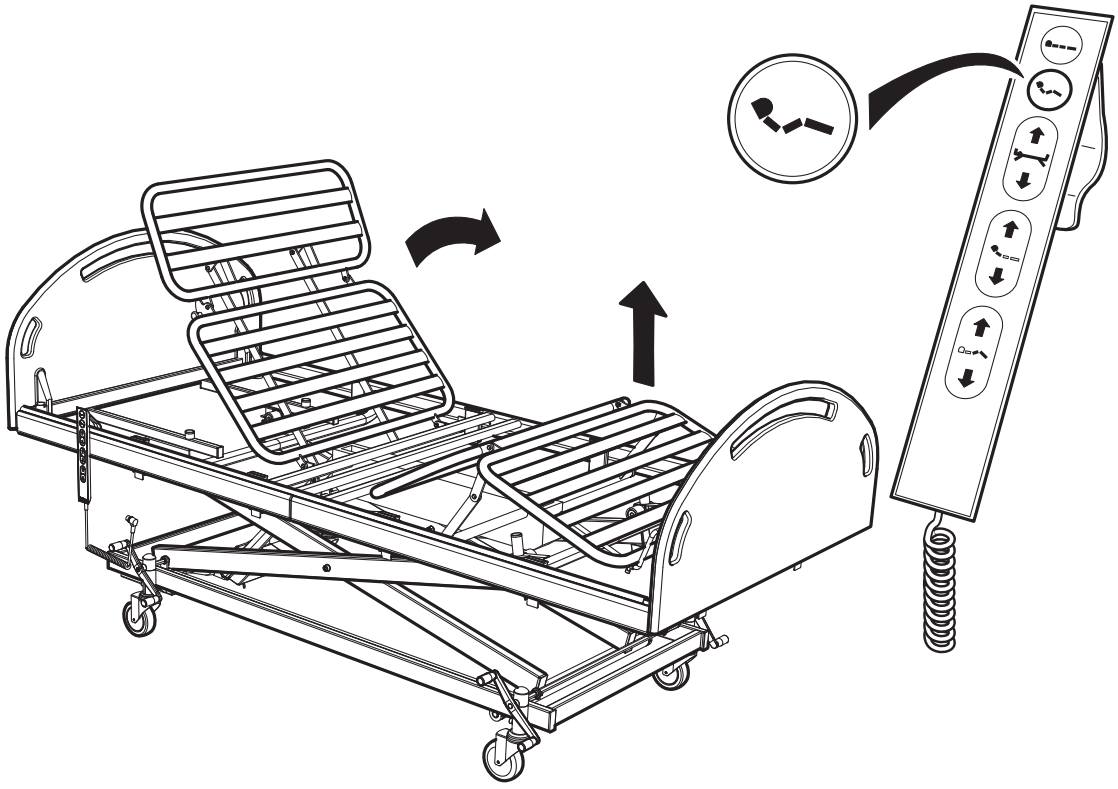
Hand control operation

N.B.! Keep the chosen button pressed until the desired position has been reached.

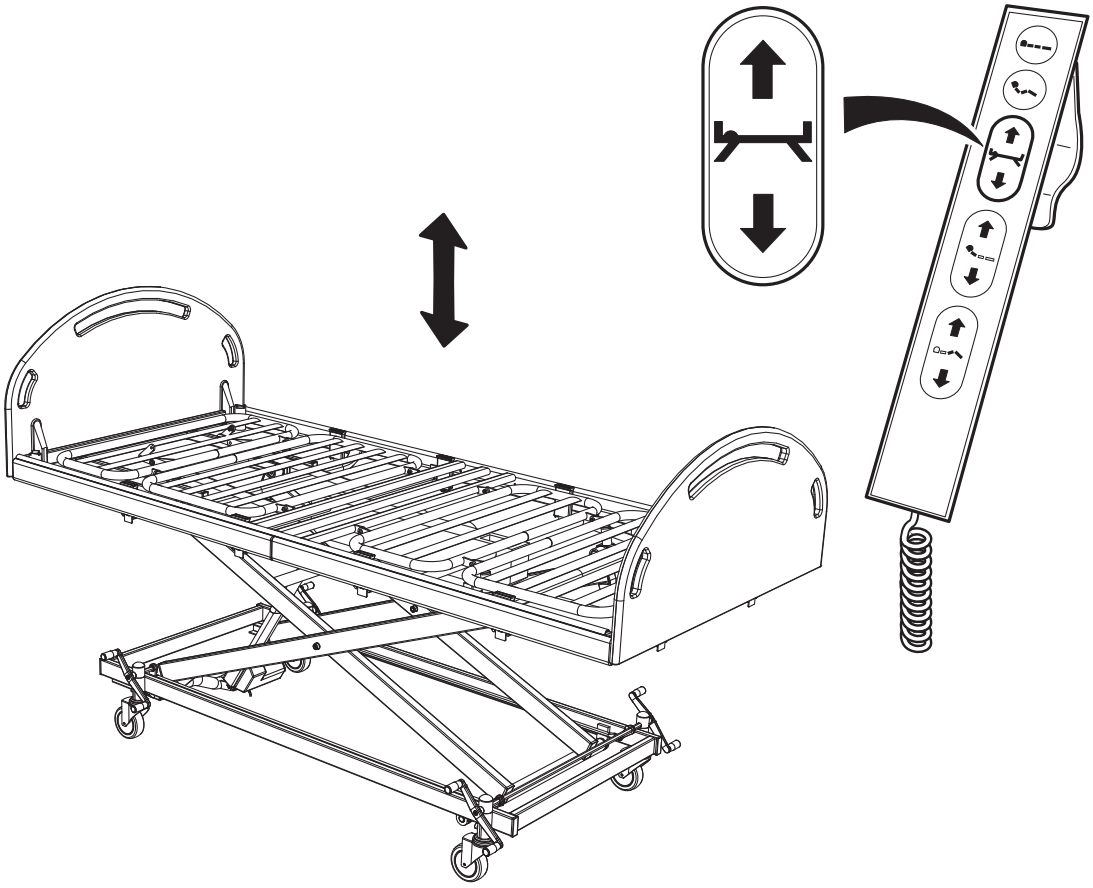
Reclining position (sleeping position).



To seated position

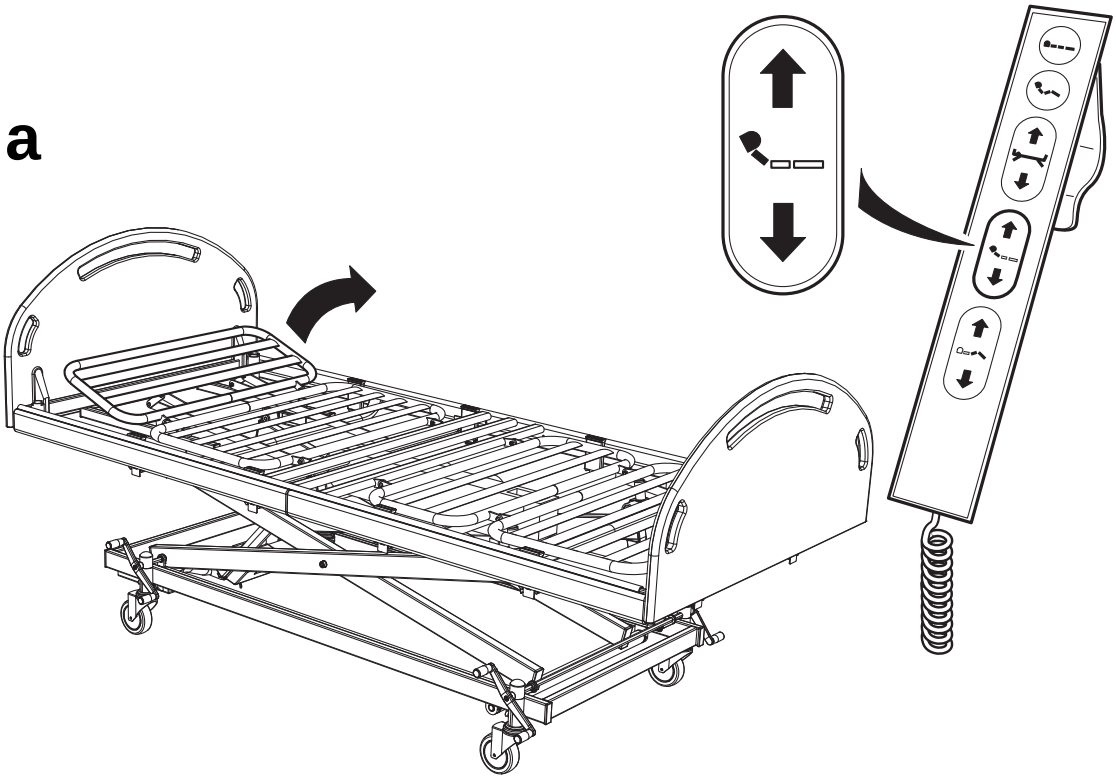


Height adjustment.

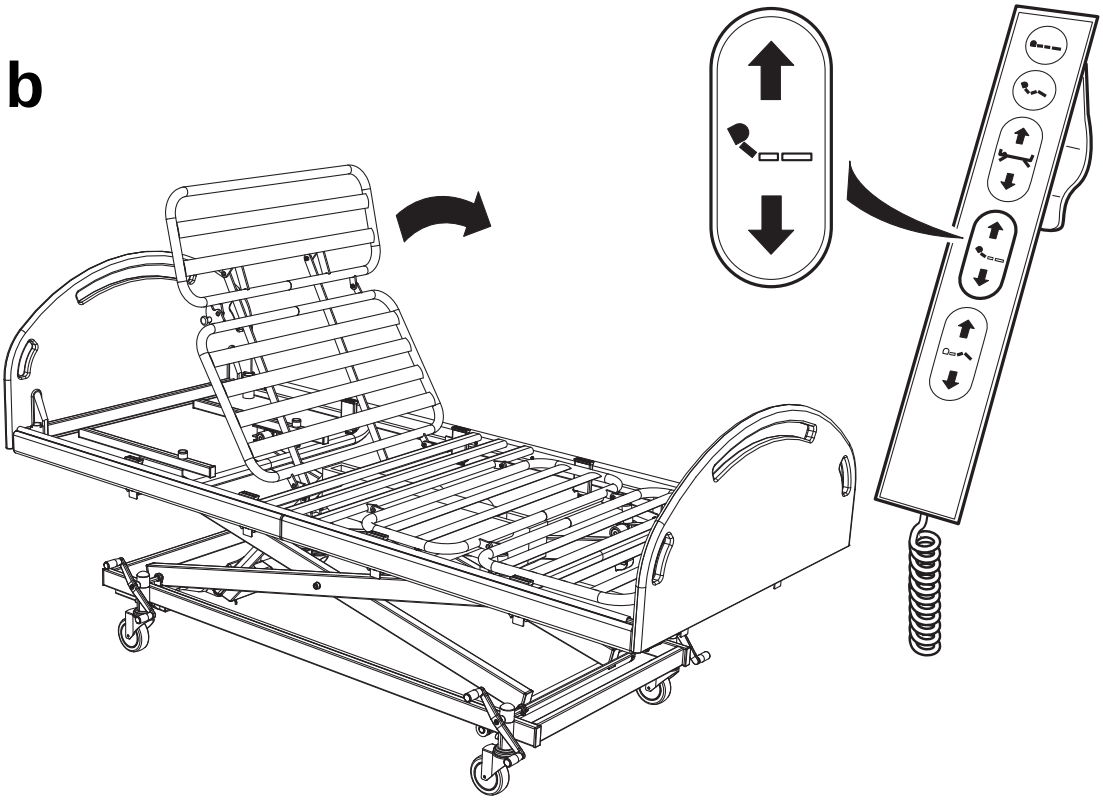


Back-rest adjustment.

a

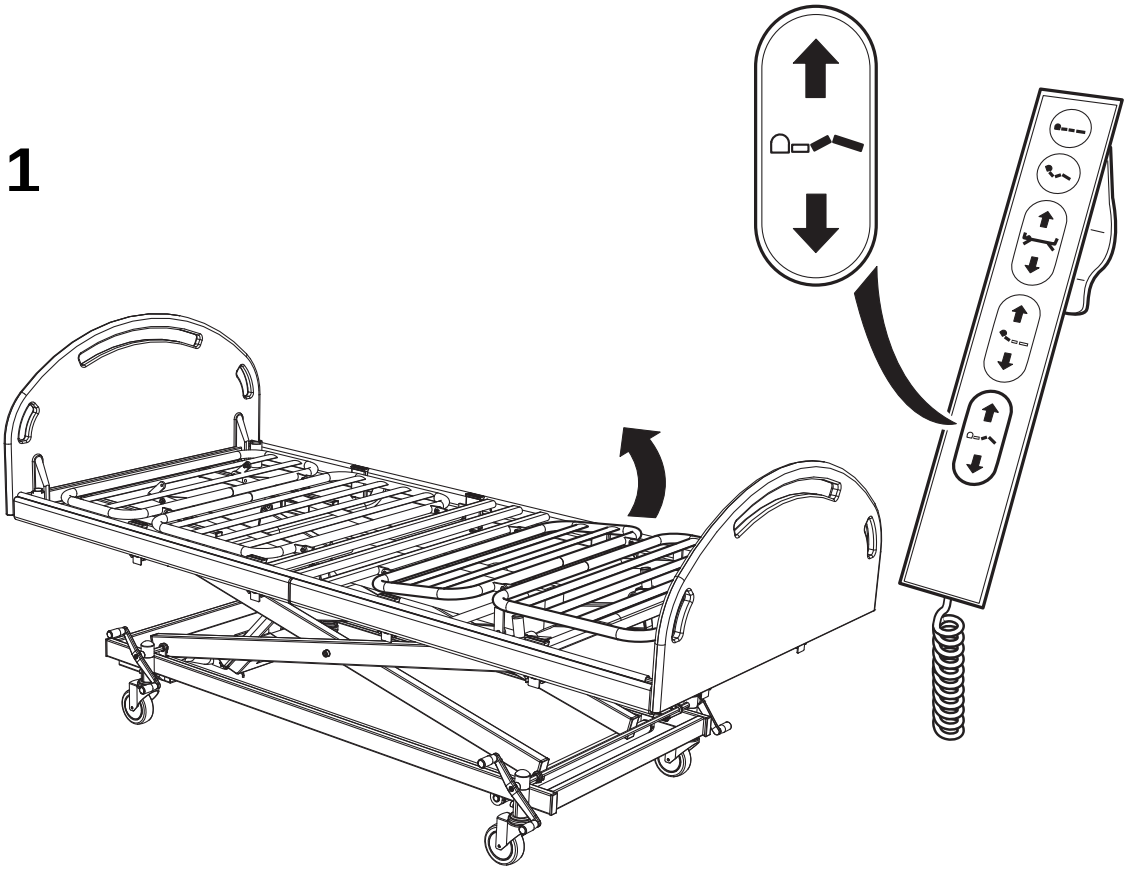


b

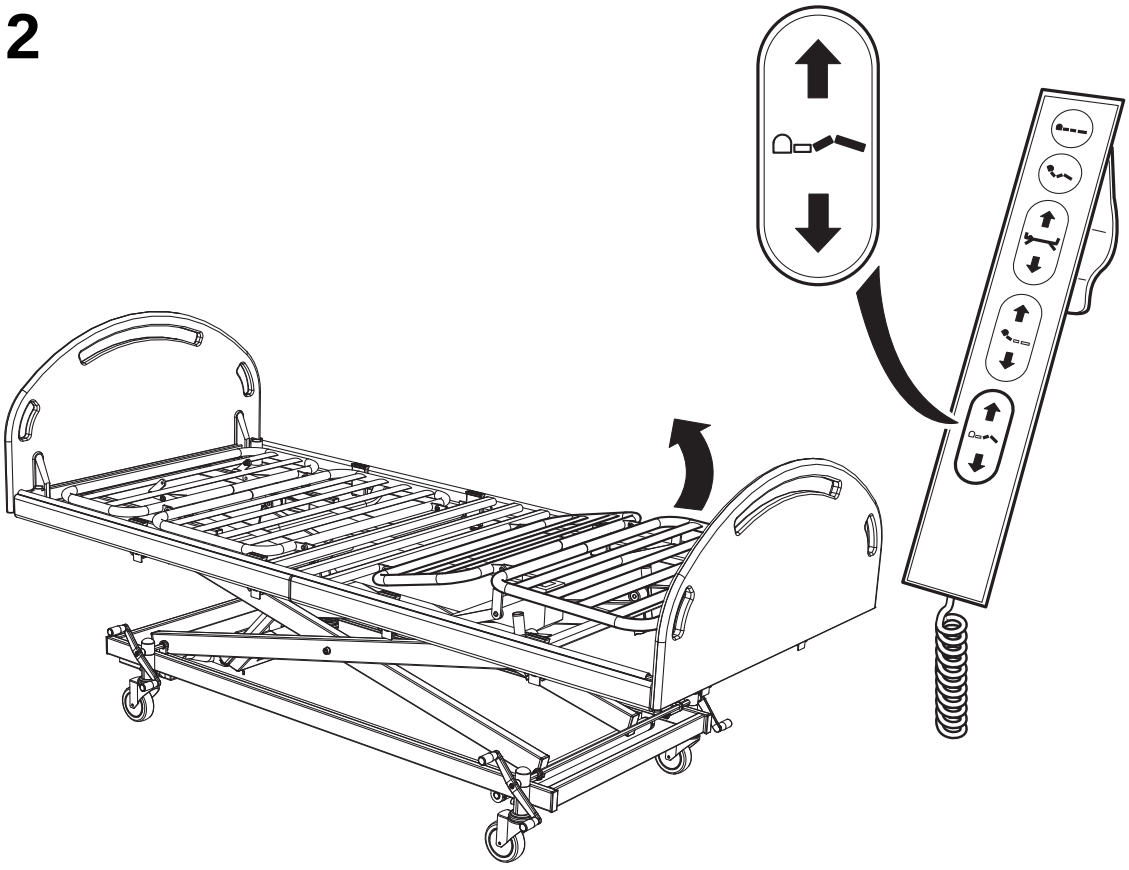


Leg support adjustment.

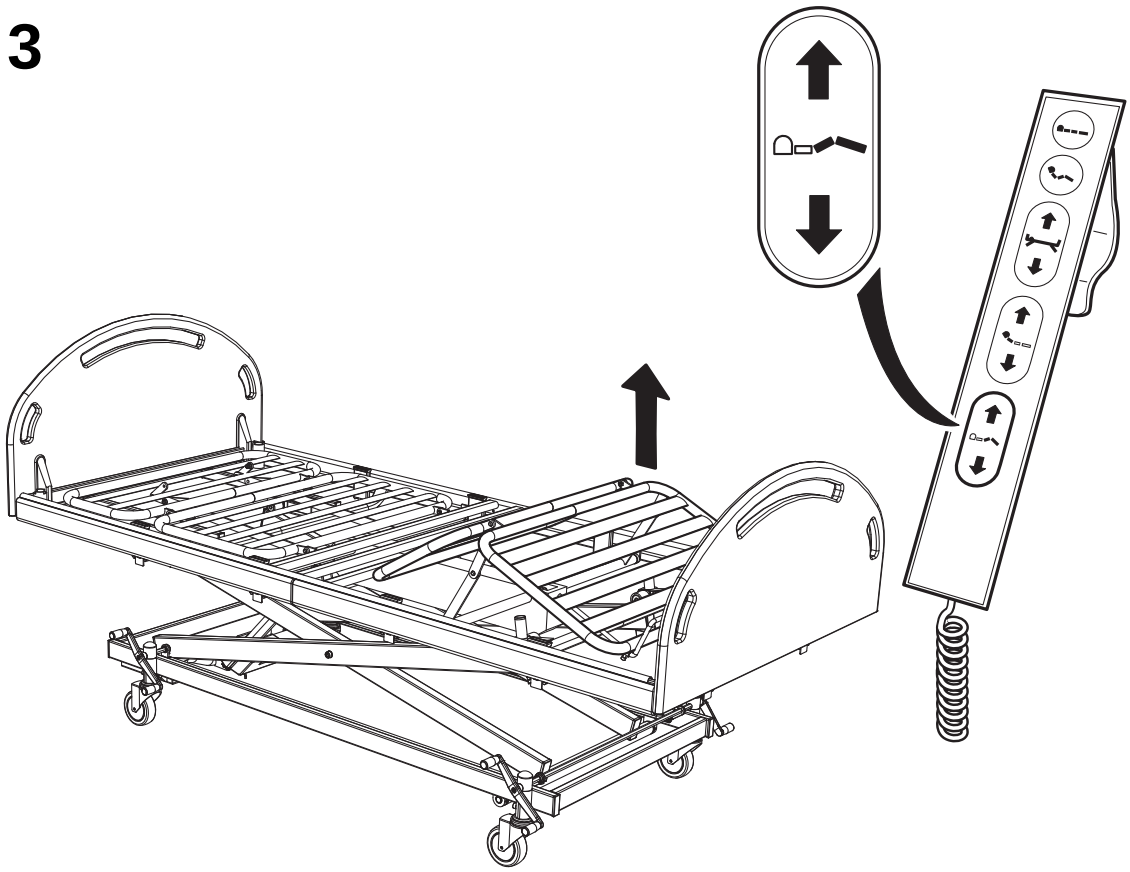
1



2

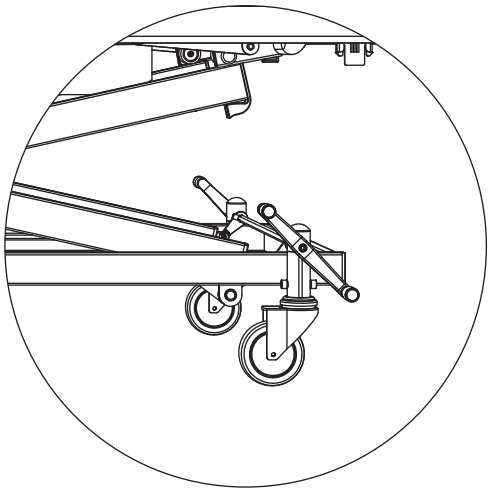


3



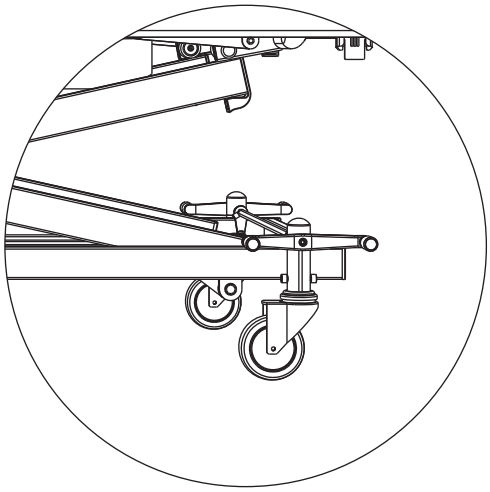
Central locking system

How to apply the bed brake.



Press the red part of the brake to brake the bed.

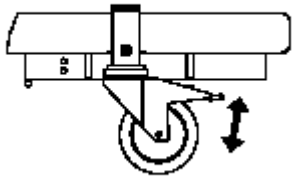
How to unbrake the bed



When the brake is in its neutral position, the bed is completely unbraked.

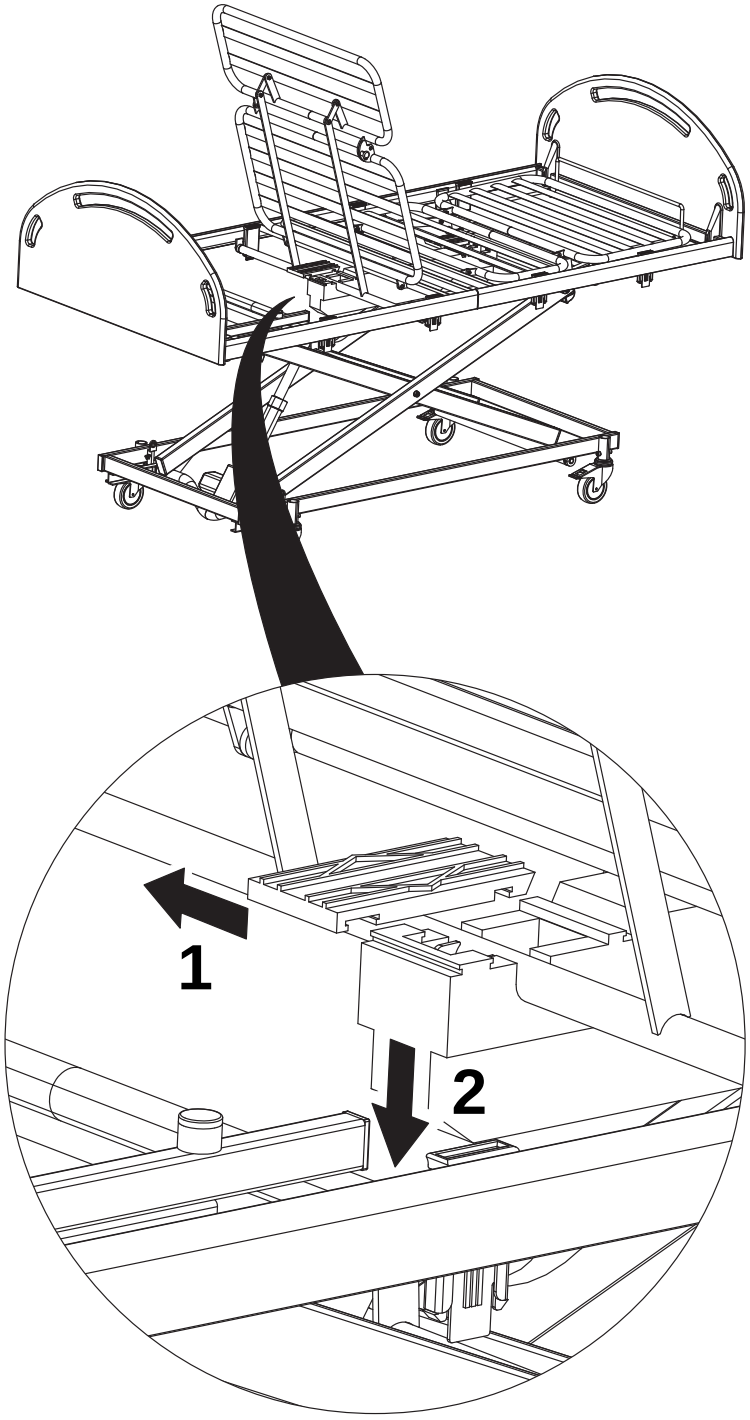
Individual locking system.

To lock one castor, push down the button. To lock the whole bed you must lock all four castors.



How to release the back-rest motor

Release the back-rest motor by pressing the cover aside. Then press the motor downwards.



A few words of advice for the user

Keep the following items in mind:

- Make the best of the bed user's own abilities for all transports.
- Start from the basis of a natural pattern of movements.
- Adjust the bed to achieve a comfortable posture for the bed user.
- Adjust the working height of the bed to suit the purpose intended (transport, activity).
- Adjust the working height of the bed to create a good working posture.
- If possible, move the bed from the wall to achieve an increased working area.

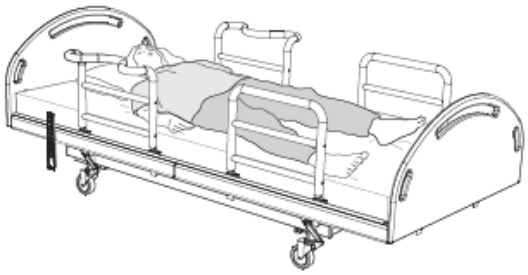
Tip!
Remember all kinds of aids available, such as glide sheets/materials or anti-slip sheets to facilitate the transport.
Always start from the bed user's needs and possibilities.

The multi-position functions and applications

Sitting posture with a low position of the legs, which can relieve the pressure on the heart.

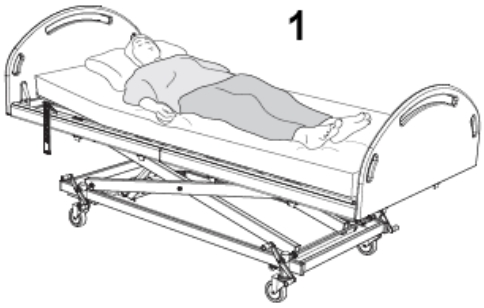
A reclining position with highly raised legs can relieve the pressure on the lower part of the back and swollen legs/feet. Can be used at easy dizziness conditions (the feet above the heart).

A reclining position with raised legs can relieve the pressure on swollen feet and can be used at easy dizziness conditions (the feet above the heart).

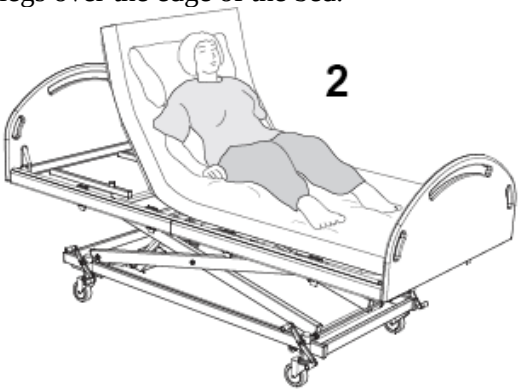


Tip! If the bed user is very anxious, lower the bed into its lowest position and mount the number of bed rails required.

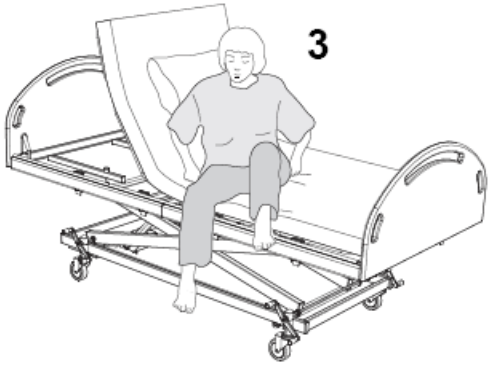
How to sit up at the edge of the bed (to lay down in the bed)



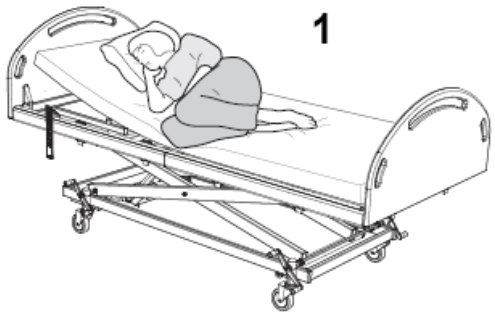
Adjust the bed user in a slight diagonal reclining position to make it easier to put the legs over the edge of the bed.



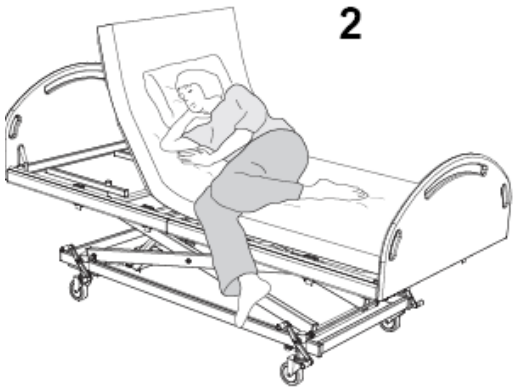
Don’t forget to raise the back-rest. It supports the bed user during the whole rising operation.



Tip; To facilitate the turning operation in the bed, put a soft swivelling plate under the bed user’s seat (at the bed edge side).



If possible, it’s easier to sit up from lying on one’s side.



Use the back-rest to reach the sit up posture.

How to rise from the bed.

Keep in mind that the feet must have floor contact.
Lean forwards to put the weight over the feet.

Make the rising from bed easier by elevating the bed. This will support a bed user with weak femoral and backside muscles or stiff hips.

Care and nursing

Keep in mind to raise the bed to a comfortable working posture. To make the care of the hair and the chiropody easy, swing away or remove the foot or headboard.

Sanitary care in the bed

Keep in mind to elevate the bed to achieve a comfortable working posture.

Maintenance schedule

N.B.! Make copies of this page and use one for each bed.

Serial number of the bed:

Items to be checked:	Date/signature								
Tighten screws and nuts. Replace a dismantled nut with a new one.									
Check welding seams.									
Tighten the attachment systems for the castors.									
Check and adjust the castor brake.									
Check the motor for the lifting function.									
Check the motor for the back-rest function.									
Check the motor for the leg support function.									
Make sure that all cables and power plugs are in a perfect condition.									
Fix any paint damages.									
Check the battery backup, if any, to find out if the battery-operated version works for the Ezz.									

Lubrication/maintenance/cleaning

Make a complete overhaul once a year at the minimum.

Castors/brakes

The castor mechanism comes greased with water-resistant mineral grease. Under normal circumstances there is no need to replace this grease except for on such occasions where the product is being frequently cleaned or when a central wash is being used. The brake must be regularly checked and adjusted.

Lifting system/joints lie down surface

All joints with a high load are equipped with self-lubricating bushings. Nevertheless, all joints should be re-greased or oiled approximately once a year or even more often if the bed is frequently washed or exposed to hard wear. On this overhaul occasion, also please check and tighten all screw joints/joints.

Locking/ratchet devices

These devices should be regularly oiled with coagulating oil. The frequency of the oiling is depending on how the bed is used, how often it is being cleaned/washed and what detergents are being used.

Electrical system

The electrical systems are free from maintenance and must not be opened. Exchange systems are available.

Cleaning of stove-enamelled parts

Use a washing detergent that dissolves albuminoidal substances and organic fatty substances. Proportion according to information on the package. The pH-value of a ready-mixed detergent solution should be between 6.5 and 7.5. The design allows the bed to be rinsed.

Cleaning of mattresses

Use a washing detergent as above or a mild soap solution. Do not use pure spirit or chlorine solutions, as they can dry out plastic materials. The mattress withstands a temperature of 95 °C.

Cleaning of wooden parts

Use a mild soap solution or dishwashing detergents.

Technical information

Regulations

The Ezz is CE-marked according to the Medical Device Directive MDD 93/42/EEC.
This bed is designed for adults from 12 years and upwards.
The mattress to be used with it shall have a thickness from 10 to 15 cm.
The mattress to be used with it shall have a width between 85 and 90 cm.
Original accessories only are allowed to be mounted to the bed.
The equipment is not intended to be exposed to flames of fire.

Technical information

SWL (Safe Working Load)	200 kilos
Thereof:	165 kilos patient's weight 20 kilos weight of mattress 15 kilos of accessories
IP-class	IP54
Voltage	~230 V AC/50 Hz
Maximum power consumption	Max. 1 A
Effect	220 W
Class of insulation	Class II type B, the patient is not separated from earth and metal frame
Intermittence	10 %, max. 2 min 'ON' and 18 min. 'OFF'
Battery	To operate the bed without 230V, use a 9V battery. Type: 9V.6LR61.522.6AM6
Sound level	61 dB, according to ISO 3746.
Height adjustability	From 33 to 80 cm
Outside dimensions of the assembled bed	98.5 x 214 cm
Mains connection	The mains cable covers an area of 3.5 m from the outside edges of the bed

Material

The Ezz-bed parts are mainly made of tubular steel.
Head and footboards and the bedsides are made of solid birch-wood.
The plastic parts are made of injection-moulded Polypropene.
The metal parts are powder coated.

Weights and measurements

Part	**Weight**	**Measurements**
Part 1 (lie down surface)	49.5 kilos	93 x 208 cm
Part 2 (lifting frame)	40 kilos	75 x 153 cm
Board	6.3 kilos	98.5 x45 cm
Mattress	----	10 to 15x85 to 90x200 to 205 cm
Support No. 1	1.6 kilos	37 cm
Support No. 2	1.6 kilos	37 cm

Environment for use

Air pressure	700 to 1060 mbar
Moisture of the atmosphere	30 to75 %
Temperature	+10 to +40 °C

Environmental labelling

Contact Environment: Helena Sahlqvist
Contact Product: Anne Karlsson

Business and operation

At Proton Engineering AB we are developing, marketing and assembling beds and accessories for care and nursing. The operation units are situated in Skillingaryd in the province of Småland in the south of Sweden.
The hospital and nursing home beds are mainly made of steel and wood, and the home care beds are made of aluminium. Today, we have no in-house manufacture of components, but purchase them. Our largest subcontractors, for components and for surface treatment, are certified according to ISO 14001. The products are being assembled in ergonomically optimised assembly-lines. After the assembly the products are being checked out and packed.

Environment

Proton Engineering AB is certified according to ISO 14001.
Our environment policy:*" We are committed to operating in a manner that continuously will improve our impact on the environment by efficiently using the resources. We are also committed to reducing our use of energy, sulphur emission and amount of waste by taking environmental precautions. We will seek to produce and to distribute our beds and other products and services with as little adverse impact as possible on the environment, within reasonable technical and economic justification. In addition to this the working environment shall be safe"*

Legal requirements and regulations for environment will be fulfilled. We shall pay attention to the environmental requirements from the world around us and plan our operations accordingly.

When choosing a supplier, who has a large environmental impact, we will request the supplier to take part in our environmental work.

We will inform our customers how to handle our products in order to achieve a long life-cycle and reduce the environmental impact.

The product

Nursing home bed Ezz

Weight: 99.7 kilos equipped with boards of birch-wood.

Measurements: 214 x 98.5cm

The product is CE-marked.

The product is approved according to EN 1970 by HMI in Copenhagen.

Integral parts:

	Weight in kilos
Steel	77.8
Wood	10.2
Aluminium	0.75
Plastics	2.7
Actuators	8.2
Packing (wooden)	12.0

The documentation is printed on a paper that is manufactured using non-chlorine bleaching.

Electronics

The electric components are manufactured without using the ozone degrading solvents CFC and HCFC.

Solder material:

The product does not contain any asbestos, mercury, PCB, or PCT.

All plastic components are free from the heavy metals lead and cadmium.
The plastic of the circuit board meets 94-VO flame retardant. Otherwise, no plastic components weighing more than 25 g contain any PBB, PBDE, or TBBPA (= flame retardants containing bromine).
The product contains no batteries, which are classified as environmentally dangerous according to The Battery Ordinance (SFS 1997:645 [The Swedish Code of Statutes]).

The power supply unit contains a transformer, relay cards and cabling.

Distribution

The packing consists of a wooden pallet. At large deliveries or on occasions where we are doing the unpacking, the pallet is being returned for reuse. Wood is a combustible material.

The transport ex works is mainly carried out by truck. The carriers are actively working for the environment and a certification for environment control is ongoing.

Use

Service and maintenance shall be carried out by competent staff with the necessary competence to secure the safety and a long life.
The cleaning of the Ezz bed with the user shall be carried out by means of a moist cloth. The bed shall be cleaned by water and disinfected by spirits prior to change of user.

Length of life

The length of life for the main parts of the bed is 10 years at a minimum.

Recycling

Ezz is designed to be easily recycled. The bed is principally made of steel. Steel is a recyclable and reusable material. Proton Caretec is responsible for the recycling and the disassembling of the Ezz bed. Those parts, which are reusable in production, are marked.

The packing should be recycled. The Proton Caretec is associated to the REPA-register (Register of Products Liability).

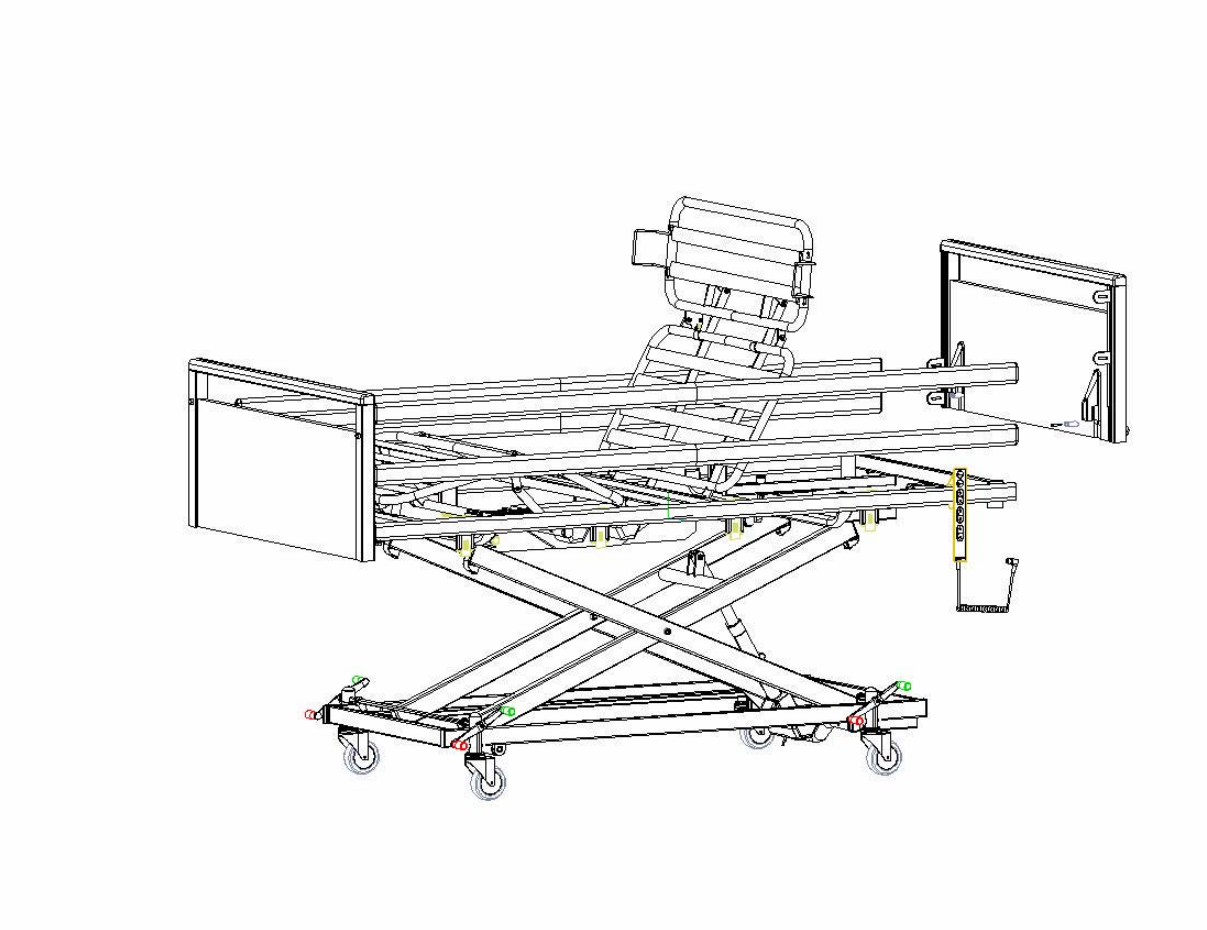
Environmental influence

All products have an influence on the environment through their whole lives. Important environmental aspects for a care and nursing bed are the manufacture of the integral material of the product, primarily steel, plastics and wood. Not only the mining and the oil industry have a great adverse impact on the environment but things like impoverishment of resources must also be considered.
The Ezz bed is optimised from the material strength point of view and it is designed not to have any unnecessary material.

You are a user – this is what you can do

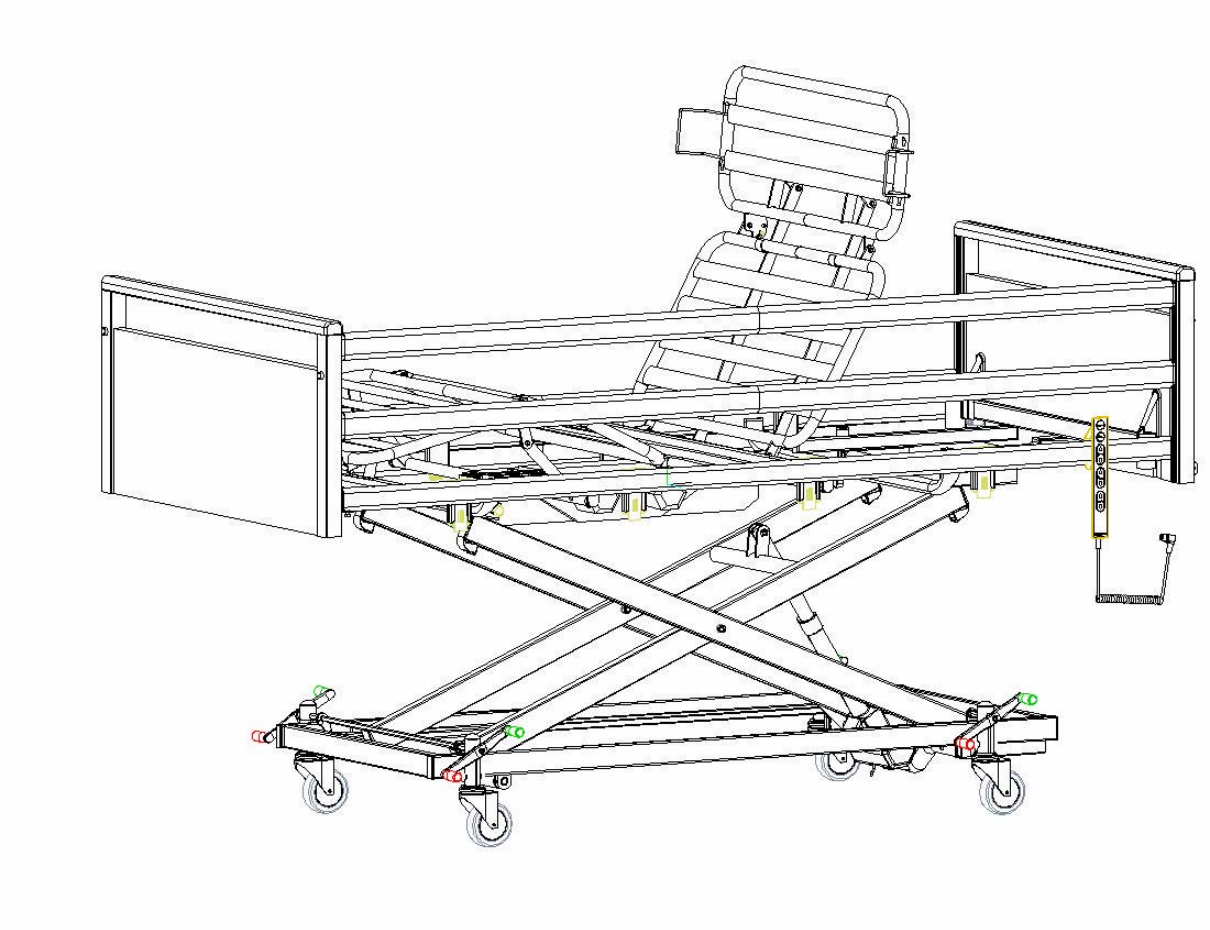
- Make certain that the bed is being properly recycled. Contact Proton Engineering AB.
- Maintenance prolongs the life of the bed.

How to assemble the integrated wooden frame.



1. Attach one of the boards and screw on the stops and screws.
2. Thread the aluminium long sides into the plastic lugs on the attached board.
3. Now take the other board and thread the plastic lugs into the aluminium long sides.
4. Attach the other board to the bed frame.
5. Screw on stops and screws.

How to operate the integrated wooden frame.



Slightly lift the upper long side.
Push the button on the outside of the board.
Lower the long side.

Repeat this operation at the other end of the long side.